



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,219	01/31/2002	Satoshi Kawashima	111694	6022

7590 03/30/2004

OLIFF & BERRIDGE  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

KIANNI, KAVEH C

ART UNIT	PAPER NUMBER
----------	--------------

2877

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,219

Applicant(s)

KAWASHIMA, SATOSHI

Examiner

Kevin C Kianni

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**-DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In dependent claim 13, the limitation a cover may be disposed over the spread illuminating apparatus is at contradiction/odds with the claimed limitation of the base claim 1, a spread illuminating apparatus (see preamble) comprises a cover (see 6<sup>th</sup> line of the claim) and thus is indefinite limitation in which the claimed invention cannot be comprehensively examined by the examiner.

***Claim Rejections –***

***35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***and – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-5 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kubo et al. (US 6456279).

Regarding claim 1, Kubo teaches a spread illuminating apparatus (shown at least in fig. 7; see abstract) comprising: a transparent substrate 40b made of a light-transmissible material and having a light reflection pattern 8 formed on at least one surface thereof (shown at least in fig.7, item reflecting patterned microprism 8 formed on the surface of the transparent substrate 40b, see col. 10, lines 12-19); and a bar-like light source 3A disposed close to an end surface of the transparent substrate 40b, wherein a cover 40a formed of a light-transmissible material is integrally provided over the one surface of the transparent substrate 4b (shown in fig. 7, item 40a, see col. 9, lines 48-59) sandwiching a cushioning material 40e-f consisting of a light-transmissible substance (see fig. 7, items c-f, see specifically col. 10, lines 12-24).

Regarding claims 2 and 4-5, Kubo further teaches wherein the cushioning material is of a substance with low refractive index (see col. 10, lines 20-24), wherein the cushioning material is of a gaseous/liquid substance (see co. 23, lines 35-47).

Regarding claims 7-8 Kubo further teaches wherein a thin film of a substance with low refractive index is formed on the light reflection pattern of the transparent substrate 40 b (see fig. 7, item 40f; see col. 10, lines 24), and the cushioning material is of a liquid/ gaseous substance (see col. 23, lines 35-45);

4. Claims 3, 6 and 9 -11 are rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Kubo et al. and Egawa et al. (US 6,295,104).

Regarding claims 3, 6 and 9 -11, Kubo teaches, as stated above, all limitations that claims 3, 6 and 9-10 depends on. Kubo further teaches wherein the cover 40a is formed of a soft material (see col. 9, lines 34-36); wherein a thin film of a substance with low refractive index 40f is formed on the light reflection pattern 8 of the transparent substrate 40b (see col. 10, lines 20-24); and cushioning material 40d-f comprises plastic spacers of polyethylene (see col. 23, lines 35-40) which can also include elastic material (see col. 25, lines 47-48). However, Kubo does not specifically teach wherein the cover is formed of a hard material/glass, and the cushioning material is of a gel substance, wherein the cushioning material comprises a plurality of transparent elastic members. Egawa teaches a spread illuminating apparatus (shown at least in figures 1 and 9; see abstract) wherein the cover 2 is

Art Unit: 2877

formed of a hard material/glass (see fig. 9 item 2 and see col. 12, lines 12-19; also see col. 1, lines 46-61) and the cushioning material 11 is of a gel substance and/or transparent elastic member (see at least col. 10--lines 31-52, specifically lines 49-52); Thus, Egawa provides spread illumination member(s) for spread illuminating apparatus that suppress the degradation of the contrast and the generation of moiré pattern which may make the observation of an image difficult (see col. 4, lines 11-17). Thus, it would have been obvious to a person of ordinary skill in the art when the invention was made to modify Kubo's illumination apparatus by substituting the soft cover 40A, and cushion material 40e-f with that of Egawa's hard/glass cover 2 and plurality of cushioning material 11 in order to produce a spread illumination apparatus that includes the above limitations, since such modification conventionally provides touch panel image display which its display surface area is uniformly illuminated so that a high-quality image display can be obtained and the brightness of the screen can be improved (see col. 3, lines 23-32).

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Kubo et al. and Hoshino et al. (US 6,323,923).

Regarding claim 12, Kubo teaches, as stated above, all limitations that claim 12 depends on. Kubo further teaches wherein the cover 40A is formed of soft transparent material (see fig. 7, item 7 and col. 9, lines 56-57). However, Kubo does not specifically teach wherein the cover is of a transparent polymer. This limitation is taught by Hoshino. Hoshino teaches a display panel (shown in fig. 1a) that comprises

Art Unit: 2877

transparent polymer substrate/cover 13 (see col. 4, lines 48-50). Thus, Hoshino provides a low cost display cover having good visibility (see col. 2, lines 37-39). Thus, it would have been obvious to a person of ordinary skill in the art when the invention was made to modify Kubo's display device by replacing its soft transparent cover 40ab with that of Hoshino's transparent polymeric cover 13 in order to have a display device that includes above limitation, since such modification would improve the coordinate recognition characteristics of the liquid crystal touch panel (279': see col. 3, lines 23-26).

#### ***Citation of Relevant Prior Art***

6. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Kubo et al. 2002/0101399 teaches at least claim 1

Caplan et al. 3612654 teaches claim 1

Tanabe 6610994

Sakata et al. 4856869 relevant in teaching at least claim 1

Rowlette 4770641 teaching gel based cushioning material

Schapel et al. 4160754 teaches polymer based substrates

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

Art Unit: 2877

**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

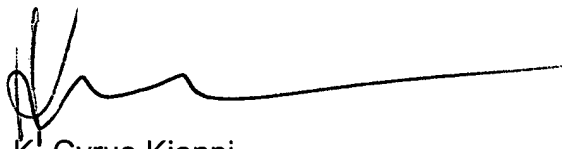
**or faxed to:**

(703) 872-9306 (for formal communications intended for entry)

**or:**

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to be 'K. Cyrus Kianni', with a long horizontal flourish extending to the right.

K. Cyrus Kianni  
Patent Examiner  
Group Art Unit 2877

March 17, 2004